



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/613,932	07/01/2003	Takahiko Tanahashi	Y-218	4638
802	7590	06/29/2006	EXAMINER	
DELLETT & WALTERS			DESTA, ELIAS	
P. O. BOX 82788			ART UNIT	
PORTLAND, OR 97282-0788			PAPER NUMBER	
			2857	

DATE MAILED: 06/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Supplemental Notice of Allowability

Application No.

10/613,932

Examiner

Elias Desta

Applicant(s)

TANAHASHI ET AL.

Art Unit

2857

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment to description of drawing filed on March 2, 2006.
2. ☒ The allowed claim(s) is/are 1-13.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

Supplemental Action

1. The amendment to the brief description of the drawings was received on March 2, 2006. The brief descriptions are now consistent with Figures 4F, 7D, 8D and 12C respectively.

Allowance Restated

2. Claims 1-13 are allowed. The following is an examiner's statement of reasons for allowance:

In reference to claims 1 and 26: Weiler et al. (IEEE Article, 'Hardware-Software-Balance Re-sampling for the Interactive Visualization of Unstructured Grids', hereon Weiler) teaches a method of re-sampling unstructured volume data on Cartesian grids for achieving interactive visualization (see Weiler, page 199, section 1 Introduction). The method further includes the re-sampling of the unstructured grid into a single Cartesian grid of predefined resolution. The designation grid is considered on a slice-by-slice basis (see Weiler, page 200, section 3, 'Hardware-supported Slicing').

Unlike Weiler, he claimed invention uses a finite volume method using a hybrid-grid adaptation for analyzing physical quantities data of continuum medium. The method includes:

- An initial grid memory containing the physical measurement data using free combination of tetrahedral, hexahedral and pentahedral cells;
- A grid dividing adaptation means for dividing a cell into plural cells; and
- A grid deleting means for recovering the former undivided cell by deleting divided cells.

Whereby providing a modified grid data adapted for more efficient calculation and memory usage in analysis of physical quantities data of the continuum medium.

The remaining claims are dependent upon claims 1 and 4 and contain further limitations.

Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elias Desta whose telephone number is (571)-272-2214. The examiner can normally be reached on M-Th (8:30-7:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc S. Hoff can be reached on (571)-272-2216. The

Art Unit: 2857

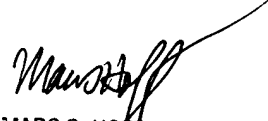
fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Elias Desta
Examiner
Art Unit 2857

- e.d.

June 22, 2006


MARC S. HOFF
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800